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Conservation Objectives Series

Union Wood SAC 000638

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Introduction

The overall aim of the Habitats Directive is to maintain or restore the favourable conservation status of habitats and species of community interest. These habitats and species are listed in the Habitats and Birds Directives and Special Areas of Conservation and Special Protection Areas are designated to afford protection to the most vulnerable of them. These two designations are collectively known as the Natura 2000 network.

European and national legislation places a collective obligation on Ireland and its citizens to maintain habitats and species in the Natura 2000 network at favourable conservation condition. The Government and its agencies are responsible for the implementation and enforcement of regulations that will ensure the ecological integrity of these sites.

A site-specific conservation objective aims to define favourable conservation condition for a particular habitat or species at that site.

The maintenance of habitats and species within Natura 2000 sites at favourable conservation condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level.

Favourable conservation status of a habitat is achieved when:

- its natural range, and area it covers within that range, are stable or increasing, and
- the specific structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future, and
- the conservation status of its typical species is favourable.

The favourable conservation status of a species is achieved when:

- population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats, and
- the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future, and
- there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

Notes/Guidelines:

1. The targets given in these conservation objectives are based on best available information at the time of writing. As more information becomes available, targets for attributes may change. These will be updated periodically, as necessary.
2. An appropriate assessment based on these conservation objectives will remain valid even if the targets are subsequently updated, providing they were the most recent objectives available when the assessment was carried out. It is essential that the date and version are included when objectives are cited.
3. Assessments cannot consider an attribute in isolation from the others listed for that habitat or species, or for other habitats and species listed for that site. A plan or project with an apparently small impact on one attribute may have a significant impact on another.
4. Please note that the maps included in this document do not necessarily show the entire extent of the habitats and species for which the site is listed. This should be borne in mind when appropriate assessments are being carried out.
5. When using these objectives, it is essential that the relevant backing/supporting documents are consulted, particularly where instructed in the targets or notes for a particular attribute.

Qualifying Interests

**** indicates a priority habitat under the Habitats Directive***

000638	Union Wood SAC
91A0	Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles

Please note that this SAC is adjacent to Unshin River SAC (001898). See map 2. The conservation objectives for this site should be used in conjunction with those for the adjacent site as appropriate.

Supporting documents, relevant reports & publications

Supporting documents, NPWS reports and publications are available for download from: www.npws.ie/Publications

NPWS Documents

Year :	1978
Title :	Areas of Scientific Interest in County Sligo
Author :	Curtis, T.G.F.; Goodwillie, R.N.; Young, R.
Series :	Unpublished Report
Year :	2008
Title :	National survey of native woodlands 2003-2008
Author :	Perrin, P.M.; Martin, J.; Barron, S.; O'Neill, F.H.; McNutt, K.E.; Delaney, A.
Series :	Unpublished report to NPWS
Year :	2010
Title :	A provisional inventory of ancient and long-established woodland in Ireland
Author :	Perrin, P.M.; Daly, O.H.
Series :	Irish Wildlife Manuals, No. 46
Year :	2012
Title :	The beetles of decaying wood in Ireland. A provisional annotated checklist of saproxylic Coleoptera
Author :	Alexander, K.N.A.; Anderson, R.
Series :	Irish Wildlife Manual No. 65
Year :	2013
Title :	Results of a monitoring survey of old sessile oak woods and alluvial forests
Author :	O'Neill, F.H.; Barron, S.J.
Series :	Irish Wildlife Manuals, No. 71
Year :	in prep.
Title :	The monitoring and assessment of four EU Habitats Directive Annex I woodland habitats
Author :	Daly, O.H.; O'Neill, F.H.; Barron, S.J.
Series :	Irish Wildlife Manuals

Other References

Year :	1993
Title :	The status and distribution of *Xylophagus ater* Meigen (Diptera: Xylohagidae) in Ireland
Author :	Alexander, K.
Series :	Irish Naturalists' Journal 24: 316-318
Year :	2002
Title :	Reversing the habitat fragmentation of British woodlands
Author :	Peterken, G.
Series :	WWF-UK, London
Year :	2016
Title :	Irish Vegetation Classification: Technical Progress Report No. 2
Author :	Perrin, P.
Series :	Report submitted to National Biodiversity Data Centre

Spatial data sources

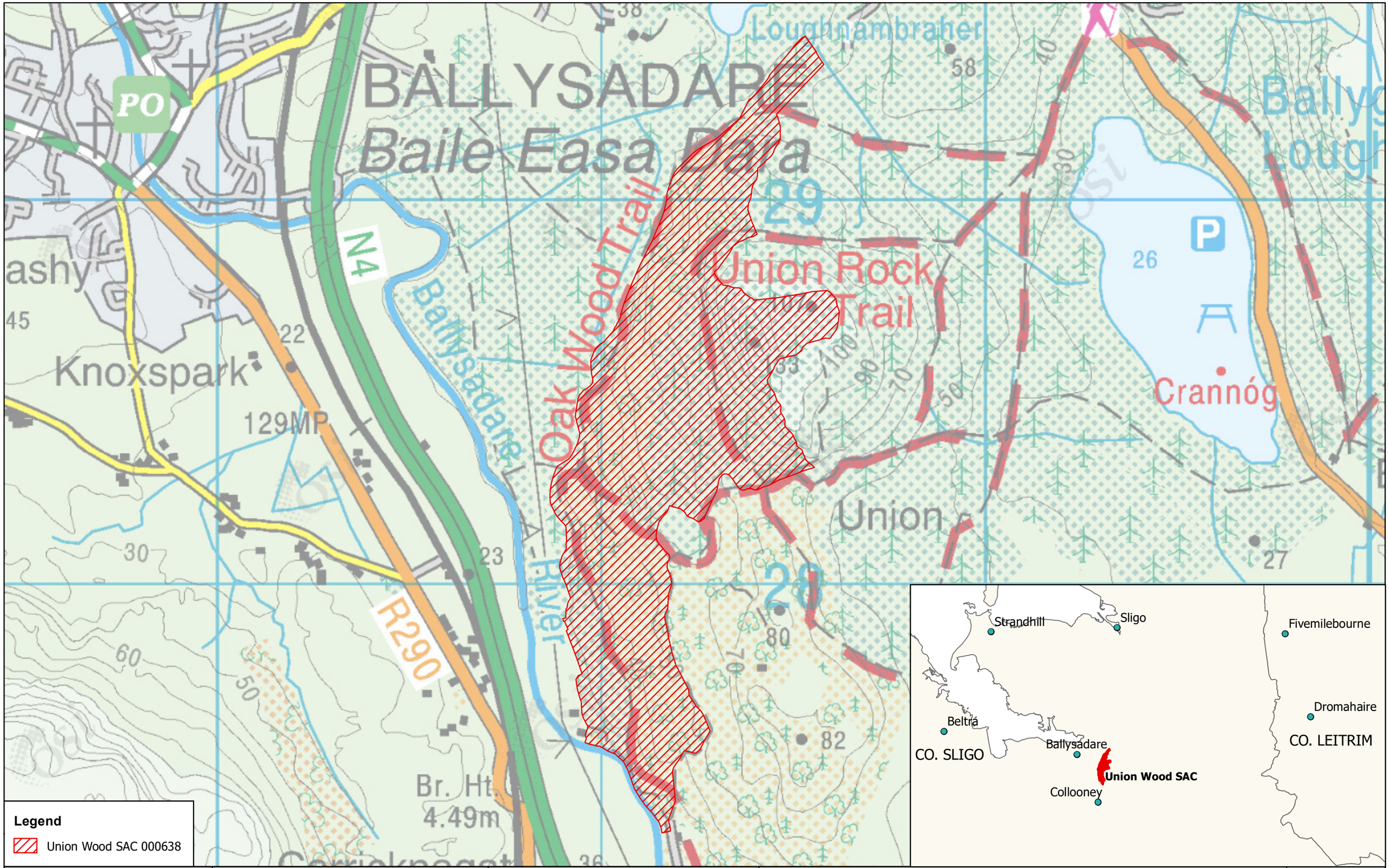
Year :	Revision 2010
Title :	National Survey of Native Woodlands 2003-2008. Version 1
GIS Operations :	QI selected; clipped to SAC boundary. Expert opinion used as necessary to resolve any issues arising
Used For :	91A0 (map 3)
Year :	2018
Title :	Woodland Monitoring Survey 2017-2018
GIS Operations :	QI selected; clipped to SAC boundary. Expert opinion used as necessary to resolve any issues arising
Used For :	91A0 (map 3)

91A0 Old sessile oak woods with Ilex and Blechnum in the British Isles

To restore the favourable conservation condition of Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles in Union Wood SAC, which is defined by the following list of attributes and targets:

Attribute	Measure	Target	Notes
Habitat area	Hectares	Area stable or increasing, subject to natural processes. See map 2	Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles is present at Union Wood SAC. Union Wood is state-owned and protected as a Nature Reserve. As part of the National Survey of Native Woodlands (NSNW), Union Wood (NSNW site code 1401) was surveyed by Perrin et al. (2008). Union Wood (code 1401) was also included in national monitoring surveys (O'Neill and Barron, 2013; Daly et al., in prep.). The minimum area of old sessile oak woodland within the SAC is estimated to be 19.0ha (Perrin. et al, 2008). It is important to note that further unsurveyed areas may be present within the SAC
Habitat distribution	Occurrence	No decline, subject to natural processes. The mapped woodland location is shown on map 2	Distribution based on Perrin et al. (2008). It is important to note that further unsurveyed areas may be present within the SAC
Woodland size	Hectares	Area stable or increasing. Where topographically possible, "large" woods at least 25ha in size and "small" woods at least 3ha in size	The target areas for individual woodlands aim to reduce habitat fragmentation and benefit those species requiring 'deep' woodland conditions (Peterken, 2002). In some cases, topographical constraints may restrict expansion
Woodland structure: cover and height	Percentage; metres; centimetres	Total canopy cover at least 30%; median canopy height at least 11m; native shrub layer cover 10-75%; native herb/dwarf shrub layer cover at least 20% and height at least 20 cm; bryophyte cover at least 4%	The target aims for a diverse structure with a relatively closed canopy containing mature trees; subcanopy layer with semi-mature trees and shrubs; and well-developed herb layer and ground layer. Assessment criteria are described in Daly et al. (in prep.) and O'Neill and Barron (2013)
Woodland structure: community diversity and extent	Hectares	Maintain diversity and extent of community types	Described in Perrin et al. (2008). See also the Irish Vegetation Classification (Perrin, 2016; www.biodiversityireland.ie/projects/national-vegetation-database/irish-vegetation-classification)
Woodland structure: natural regeneration	Seedling: sapling: pole ratio	Seedlings, saplings and pole age-classes of target species for 91A0 woodlands and other native tree species occur in adequate proportions to ensure survival of woodland canopy	The target species for 91A0 are sessile oak (*Quercus petraea*) and the hybrid oak *Quercus* x *rosacea*. Assessment criteria are described in Daly et al. (in prep.) and O'Neill and Barron (2013). Union Wood exhibits poor structure due to, inter alia, a lack of small and medium-sized *Quercus* trees and seedlings (Daly et al., in prep.)
Woodland structure: dead wood	Number per hectare	At least 19 stems/ha of dead wood of at least 20cm diameter	Dead wood is a valuable resource and an integral part of a healthy, functioning woodland ecosystem. Dead wood comprises old senescent trees, standing dead trees, fallen dead wood (including large branches) and rotten stumps of any species. Assessment criteria are described in Daly et al. (in prep.) and O'Neill and Barron (2013)
Woodland structure: veteran trees	Number per hectare	No decline	Veteran trees are important habitats for bryophytes, lichens, saproxylic organisms, and some bird species. Their retention is important to ensure continuity of habitats/niches and propagule sources

Woodland structure: indicators of local distinctiveness	Occurrence	No decline	Includes ancient or long-established woodlands (see Perrin and Daly, 2010), archaeological and geological features as well as red listed and other rare or localised species. Almost all of the old sessile oak woodland within the SAC has been identified as Possible Ancient Woodland by Perrin and Daly (2010). The site contains thin-spiked wood-sedge (*Carex strigosa*), Tunbridge filmy-fern (*Hymenophyllum tunbridgense*) and the tree lungwort lichen (*Lobaria pulmonaria*) (NPWS internal files). The rare woodland fly species *Chrysogaster virescens* and *Xylophagus ater* and the scarce old growth beetle species *Cerylon ferrugineum* have also been recorded from the area (Alexander, 1993; Alexander and Anderson, 2012; NPWS internal files)
Woodland structure: indicators of overgrazing	Occurrence	All four indicators of overgrazing absent	There are four indicators of overgrazing within 91A0: topiary effect on shrubs and young trees, browse line on mature trees, abundant dung, and severe recent bark stripping (Daly et al., 2020; O'Neill and Barron, 2013). Overgrazing by deer was noted by Curtis et al. (1978) at Union Wood. Although fencing was undertaken, and grazing was not reported as an issue in 2011-12, overgrazing was recorded within the site in 2017-18 (Daly et al., in prep.; O'Neill and Barron, 2013)
Vegetation composition: native tree cover	Percentage	No decline. Native tree cover at least 90% of canopy; target species cover at least 50% of canopy	The target species for 91A0 are sessile oak (*Quercus petraea*) and the hybrid oak *Quercus* x *rosacea* (Daly et al., in prep.; O'Neill and Barron, 2013)
Vegetation composition: typical species	Occurrence	At least 1 target species for 91A0 woodlands present; at least 6 positive indicator species for 91A0 woodlands present	A variety of typical native species should be present, depending on woodland type. The target species for 91A0 are sessile oak (*Quercus petraea*) and the hybrid oak *Quercus* x *rosacea*. Positive indicator species for 91A0 are listed in Daly et al. (in prep.) and O'Neill and Barron (2013)
Vegetation composition: negative indicator species	Occurrence	Negative indicator species cover not greater than 10%; regeneration of negative indicator species absent	Negative indicator species (i.e. any non-native species, including herbaceous species such as montbretia (*Crocosmia* x *crocosmiiflora*) should be absent or under control. The non-native invasive species beech (*Fagus sylvatica*), sycamore (*Acer pseudoplatanus*) and rhododendron (*Rhododendron ponticum*) are present within Union Wood (NPWS internal files). Rhododendron control has previously been undertaken (Perrin et al., 2008) but continued control of non-native species is required (Daly et al., in prep.)



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Department of Housing, Local Government and Heritage

MAP 1:
UNION WOOD SAC
CONSERVATION OBJECTIVES
SAC DESIGNATION

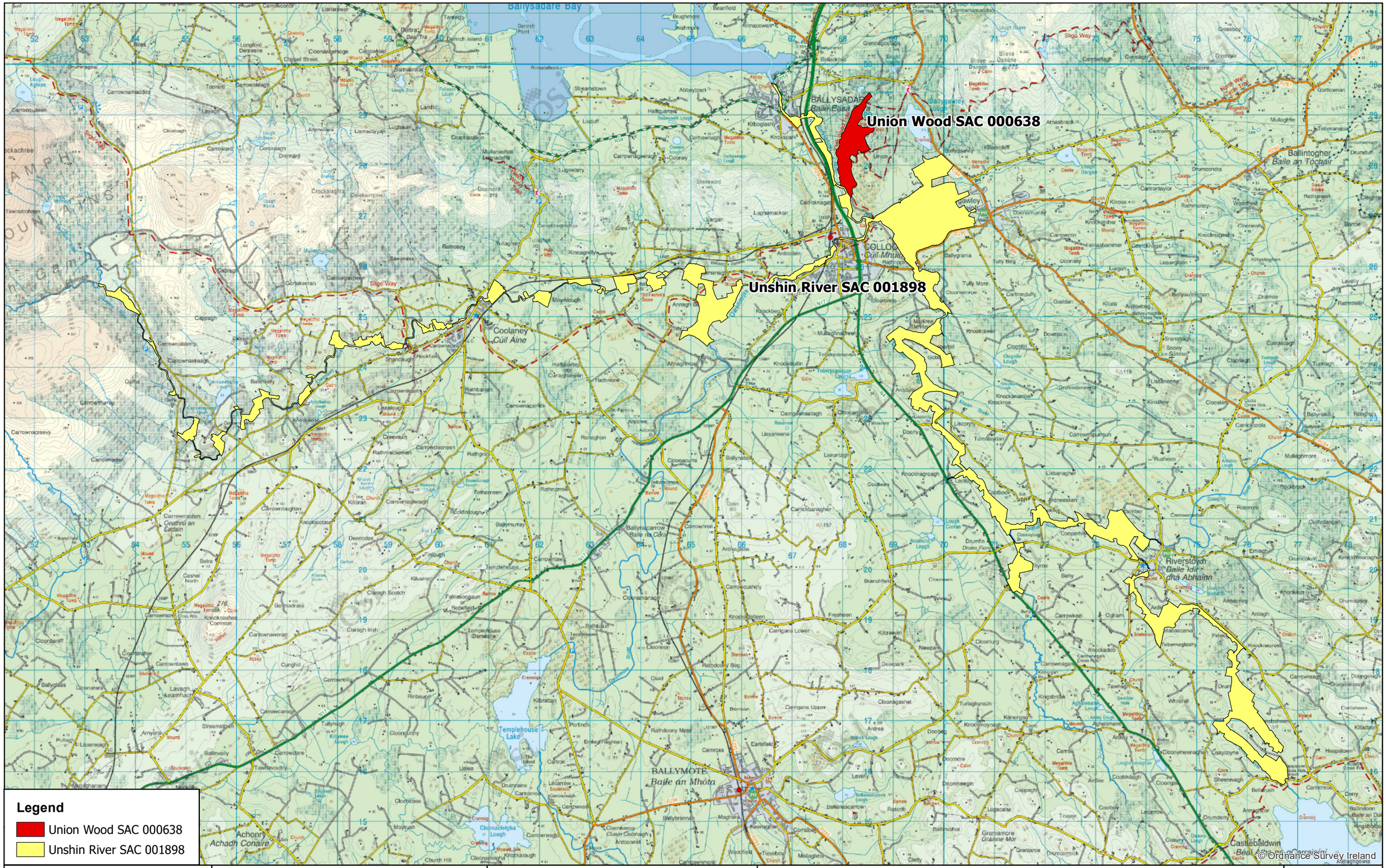
Map to be read in conjunction with the NPWS Conservation Objectives Document

SITE CODE:
SAC 000638; version 3.01. CO. SLIGO

0 125 250 500 Metres

N

Date: October 2020



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MAP 2:
UNION WOOD SAC
CONSERVATION OBJECTIVES
ADJACENT SITE

Map to be read in conjunction with the NPWS Conservation Objectives Document

SITE CODE:
SAC 000638; version 3.01. CO. SLIGO

0 0.5 1 2 Kilometres

N

Date: October 2020

Legend

Union Wood SAC 000638

91A0 Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles

Ordnance Survey Ireland

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Department of Housing, Local Government and Heritage

MAP 3:
UNION WOOD SAC
CONSERVATION OBJECTIVES
WOODLAND HABITATS

Map to be read in conjunction with the NPWS Conservation Objectives Document

SITE CODE:
SAC 000638; version 3.01. CO. SLIGO

0 125 250 500 Metres

N

Date: October 2020